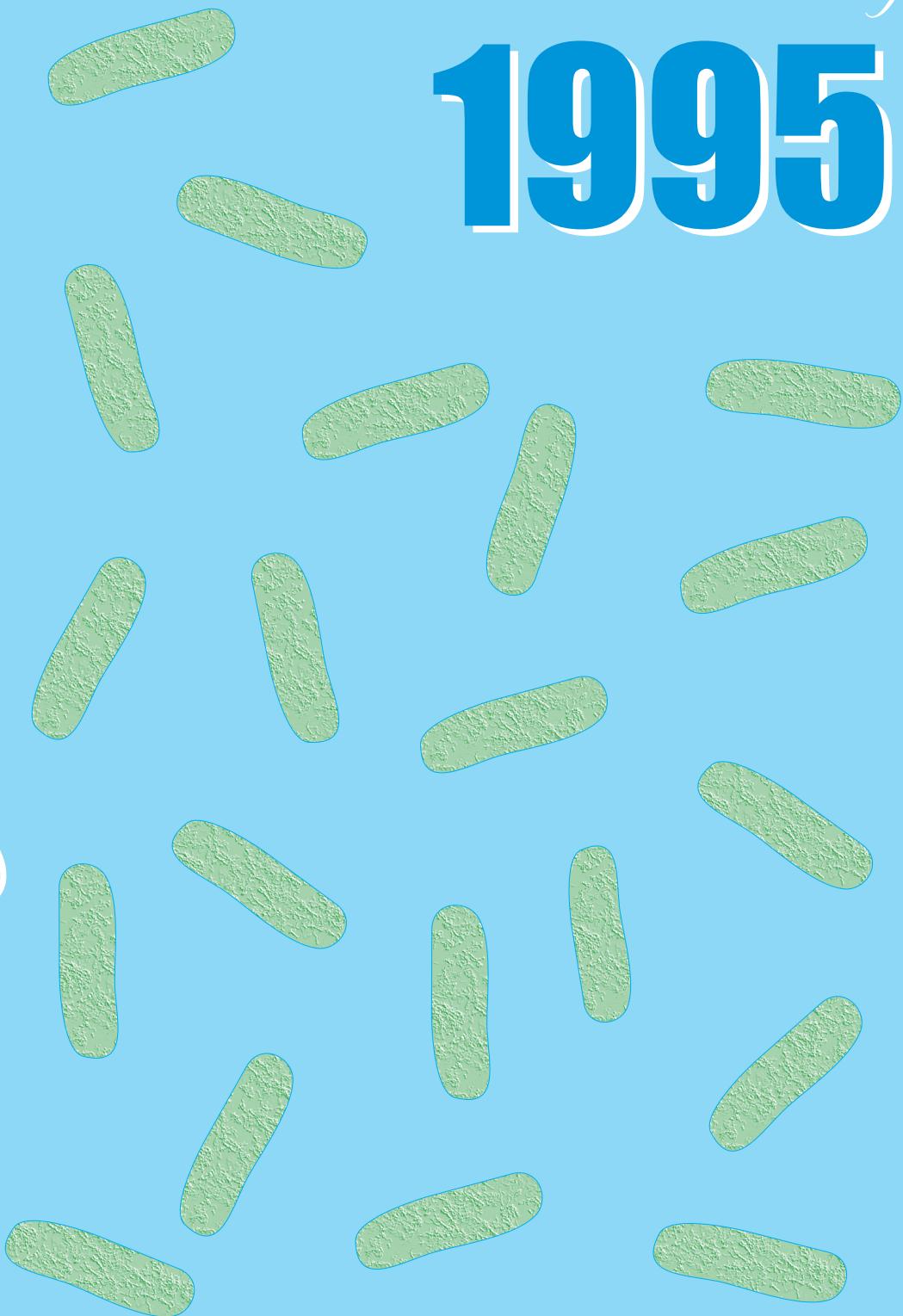


Shiga Toxins



Annual Summary
1995



Department of Health and Human Services
Centers for Disease Control and Prevention
National Center for Infectious Diseases
Division of Bacterial and Mycotic Diseases
Foodborne and Diarrheal Diseases Branch
Atlanta, GA 30333



Laboratory-Confirmed *Shigella* Surveillance Annual Summary, 1995

The Annual Summary contains surveillance data on reported laboratory-confirmed *Shigella* isolates in the United States. The National *Shigella* Surveillance System collects reports of isolates of *Shigella* from every state in the United States. This information is reported electronically through the Public Health Laboratory Information System (PHLIS) by the State Public Health Laboratory Directors and State and Territorial Epidemiologists to the Foodborne and Diarrheal Diseases Branch (FDDB) and the Biostatistics and Information Management Branch (BIMB) of the Division of Bacterial and Mycotic Diseases in the National Center for Infectious Diseases.

The National *Shigella* Surveillance System is based on data collected by state and territorial public health laboratories. *Shigella* isolates are submitted to the state public health laboratory by clinical diagnostic laboratories. The state and territorial laboratories confirm the isolates as *Shigella*, perform subtyping, and submit the data for reporting through PHLIS. Unusual or untypable isolates are forwarded to the National *Shigella* Reference Laboratory at the Centers for Disease Control and Prevention for further characterization or confirmation. These results are reported back to the state laboratory, where they are reported to CDC through PHLIS.

The capture of isolates in the National *Shigella* Surveillance System is considered to be consistent. However, some *Shigella* isolates may not be forwarded or reported to state public health laboratories and therefore are not captured. In addition, irrespective of the surveillance system, many cases of *Shigella* illness are not reported because the ill person does not seek medical care, the health-care provider does not obtain a specimen for diagnosis or the laboratory does not perform culture for *Shigella*. The results of surveillance reported herein are therefore substantial underestimates of the true number of infections.

The number of isolates reported by state represents the state where laboratory confirmation and subtyping were performed. In some instances, the reporting state is not the same as the state of residence of the person from whom the isolate was obtained. For the Annual Summaries, duplicate records are deleted.

There are 4 major subgroups and 43 recognized serotypes of *Shigella*, shown in Table A below.

Table A. Subgroups, Serotypes and Subtypes of *Shigella*

Subgroups	Serotypes and Subtypes
Group A: <i>Shigella dysenteriae</i>	15 serotypes (type 1 produces Shiga toxin)
Group B: <i>Shigella flexneri</i>	8 serotypes and 9 subtypes
Group C: <i>Shigella boydii</i>	19 serotypes
Group D: <i>Shigella sonnei</i>	1 serotype

These subgroups and serotypes are differentiated from one another by their biochemical traits (such as ability to ferment mannitol) and antigenic properties (Table B).

Table B. Classification of *Shigella* subgroups.

			Carbohydrate fermentation		
Species	Group	Serotypes	Glucose	Mannitol	Lactose
<i>S. dysenteriae</i>	A	15	+	-	-
<i>S. flexneri</i>	B	8	+	+	-
<i>S. boydii</i>	C	19	+	+	-
<i>S. sonnei</i>	D	1	+	+	Late

Since there are no recognized environmental or animal reservoirs for *Shigella*, except higher primates, the isolates reported herein are all from infected humans.

This report can be viewed online at www.cdc.gov/ncidod/dbmd/phlisdata/. Further information concerning data described in this report can be obtained by contacting the Foodborne and Diarrheal Diseases Branch (404) 639-2206. For further information concerning PHLIS, please contact the Biostatistics and Information Management Branch (404) 639-1364.

The Surveillance Outbreak Detection Algorithm (SODA), developed by BIMB and FDDB, is a statistical algorithm based on the National Surveillance Data. It is designed to detect unusual clusters of *Salmonella* and *Shigella* infection. SODA compares current *Salmonella* and *Shigella* isolates reported through PHLIS by subgroup or serotype with a 5 year historical baseline for that subgroup or serotype for the specified time period to detect unusual increases from the baseline. Analyses can be conducted at state, regional, or national levels. Since 1996, SODA has been implemented at CDC and selected state health departments. If you would like more information on SODA, please call the PHLIS Helpdesk (404) 639-3365.



Eric Mintz, M.D., M.P.H.
Chief, Diarrheal Diseases Epidemiology Section
Foodborne and Diarrheal Diseases Branch



Nancy H. Bean, Ph.D.
Chief, Biostatistics and Information
Management Branch



Robert V. Tauxe, M.D., MPH
Chief, Foodborne and Diarrheal Diseases Branch

Division of Bacterial and Mycotic Diseases

National Center for Infectious Diseases

Centers for Disease Control and Prevention

Recommended Reference Citation:

CDC. *Shigella Surveillance: Annual Summary, 1995*. Atlanta, Georgia: US Department of Health and Human Services, CDC, 1996.

Single copies of *Shigella: Annual Summary 1995* are available in multiple formats from:

Centers for Disease Control and Prevention
Foodborne and Diarrheal Diseases Branch
Mail Stop: A38
1600 Clifton Road
Atlanta, Georgia 30333
Telephone: 404-639-2206
<http://www.cdc.gov/ncidod/dbmd/offices.htm>

Copyright Information

All material in this report is in the public domain and may be used and reprinted without permission; citation of source is appreciated.

Copyright ©1996 Centers for Disease Control and Prevention.

TABLE OF CONTENTS

TABLE 1	1
<i>Shigella</i> subgroups reported to the CDC for 1995	
TABLE 2	2
Number of reported isolates of <i>Shigella</i> serotypes for 1995	
TABLE 3	3
Age and sex of persons from whom isolates of <i>Shigella</i> were reported for 1995	
TABLE 3A	4
Age and sex of persons from whom isolates of <i>S. boydii</i> were reported for 1995	
TABLE 3B	5
Age and sex of persons from whom isolates of <i>S. dysenteriae</i> were reported for 1995	
TABLE 3C	6
Age and sex of persons from whom isolates of <i>S. flexneri</i> were reported for 1995	
TABLE 3D	7
Age and sex of persons from whom isolates of <i>S. sonnei</i> were reported for 1995	
TABLE 3E	8
Age and sex of persons from whom isolates of unknown serogroup were reported for 1995	
TABLE 4	9
Median age of persons from whom isolates of <i>Shigella</i> were reported, by serogroup, for 1981-1995	
TABLE 5	10
Number of reported <i>Shigella</i> isolates by residence for 1981-1995	
TABLE 5A	10
Number of reported <i>S. boydii</i> isolates by residence for 1981-1995	
TABLE 5B	11
Number of reported <i>S. dysenteriae</i> isolates by residence for 1981-1995	
TABLE 5C	11
Number of reported <i>S. flexneri</i> isolates by residence for 1981-1995	
TABLE 5D	12
Number of reported <i>S. sonnei</i> isolates by residence for 1981-1995	
TABLE 5E	12
Number of reported <i>Shigella</i> isolates with unknown subgroup by residence for 1981-1995	

TABLE 6	.....	13
Number of reported <i>Shigella</i> isolates by month for 1995		
TABLE 7	.....	15
Number of reported <i>Shigella</i> isolates by month for 1981-1995		
TABLE 8	.....	17
Number of reported <i>Shigella</i> isolates by region for 1981-1995		
TABLE 8A	.....	18
Number of reported <i>S. sonnei</i> isolates by region for 1981-1995		
TABLE 8B	.....	19
Number of reported <i>S. flexneri</i> isolates by region for 1981-1995		
TABLE 8C	.....	20
Number of reported <i>S. boydii</i> isolates by region for 1981-1995		
TABLE 8D	.....	21
Number of reported <i>S. dysenteriae</i> isolates by region for 1981-1995		
TABLE 8E	.....	22
Number of reported <i>Shigella</i> isolates with unknown serogroup by region for 1981-1995		
TABLE 9	.....	23
Number of reported <i>Shigella</i> subgroup isolates by year for 1981-1995		
TABLE 10	.....	24
Number of reported <i>Shigella</i> isolates by state for 1981-1995		
TABLE 10A	.....	27
Number of reported <i>S. sonnei</i> isolates by state for 1981-1995		
TABLE 10B	.....	30
Number of reported <i>S. flexneri</i> isolates by state for 1981-1995		
TABLE 10C	.....	33
Number of reported <i>S. boydii</i> isolates by state for 1981-1995		
TABLE 10D	.....	36
Number of reported <i>S. dysenteriae</i> isolates by state for 1981-1995		
TABLE 10E	.....	39
Number of reported <i>Shigella</i> isolates with unknown serogroup by state for 1981-1995		

TABLE 1
SHIGELLA SUBGROUPS REPORTED TO THE CDC
FOR 1995

RANK	SPECIES	NUMBER	PERCENT
1	SONNEI	14811	76.6
2	FLEXNERI	3019	15.6
3	BOYDII	229	1.2
4	DYSENTERIAE	90	0.5
	SUBTOTAL	18149	93.9
	UNKNOWN	1181	6.1
	TOTAL	19330	100.0

TABLE 2
NUMBER OF REPORTED ISOLATES OF SHIGELLA
SEROTYPES FOR 1995

RANK	SEROTYPE	NUMBER	PERCENT
1	SONNEI	14811	76.6
2	FLEXNERI UNSPECIFIED	1528	7.9
3	FLEXNERI 1 UNSPECIFIED	412	2.1
4	FLEXNERI 2 UNSPECIFIED	382	2.0
5	FLEXNERI 3 UNSPECIFIED	246	1.3
6	FLEXNERI 4 UNSPECIFIED	139	0.7
7	BOYDII UNSPECIFIED	108	0.6
8	FLEXNERI 6	107	0.6
9	FLEXNERI 2A	71	0.4
10	FLEXNERI 5 UNSPECIFIED	62	0.3
11	BOYDII 2	60	0.3
12	DYSENTERIAE UNSPECIFIED	54	0.3
13	BOYDII 4	21	0.1
14	DYSENTERIAE 3	17	0.1
15	FLEXNERI 1B	17	0.1
16	FLEXNERI 2B	17	0.1
17	BOYDII 1	15	0.1
18	BOYDII 14	12	0.1
19	FLEXNERI 4A	12	0.1
20	FLEXNERI 3A	11	0.1
21	DYSENTERIAE 2	10	0.1
22	BOYDII 10	7	0.0
23	DYSENTERIAE 1	7	0.0
24	FLEXNERI 3B	6	0.0
25	FLEXNERI 1A	4	0.0
26	FLEXNERI VARIANT Y	4	0.0
27	BOYDII 3	2	0.0
28	BOYDII 17	1	0.0
29	BOYDII 5	1	0.0
30	BOYDII 8	1	0.0
31	BOYDII 9	1	0.0
32	DYSENTERIAE 12	1	0.0
33	DYSENTERIAE 9	1	0.0
34	FLEXNERI 3C	1	0.0
UNKNOWN		1181	6.1
TOTAL		19330	100.0

TABLE 3
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF SHIGELLA WERE REPORTED FOR 1995

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	173	179	55	407
1 TO 4 YRS	1937	2000	169	4106
5 TO 9 YRS	1410	1236	102	2748
10 TO 19 YRS	649	516	53	1218
20 TO 29 YRS	1091	470	49	1610
30 TO 39 YRS	775	509	45	1329
40 TO 49 YRS	373	239	23	635
50 TO 59 YRS	216	135	15	366
60 TO 69 YRS	105	72	8	185
70 TO 79 YRS	60	46	4	110
80+ YEARS	45	19	3	67
UNKNOWN AGE	395	375	5779	6549
TOTAL	7229	5796	6305	19330

TABLE 3A

AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF BOYDII WERE REPORTED FOR 1995

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	4	3	1	8
1 TO 4 YRS	14	12	1	27
5 TO 9 YRS	11	12	1	24
10 TO 19 YRS	7	6	3	16
20 TO 29 YRS	15	7	2	24
30 TO 39 YRS	6	8	1	15
40 TO 49 YRS	1	2	2	5
50 TO 59 YRS	2	1	1	4
60 TO 69 YRS	2	1	.	3
70 TO 79 YRS	.	.	1	1
80+ YEARS	1	1	.	2
UNKNOWN AGE	4	1	95	100
TOTAL	67	54	108	229

TABLE 3B
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF DYSENTERIAE WERE REPORTED FOR 1995

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	1	.	.	1
1 TO 4 YRS	1	4	1	6
5 TO 9 YRS	.	1	.	1
10 TO 19 YRS	2	1	.	3
20 TO 29 YRS	3	4	.	7
30 TO 39 YRS	3	3	.	6
40 TO 49 YRS	2	2	.	4
50 TO 59 YRS	2	3	.	5
70 TO 79 YRS	1	1	.	2
UNKNOWN AGE	2	2	51	55
TOTAL	17	21	52	90

TABLE 3C
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF FLEXNERI WERE REPORTED FOR 1995

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	18	26	2	46
1 TO 4 YRS	243	183	15	441
5 TO 9 YRS	107	85	7	199
10 TO 19 YRS	59	61	4	124
20 TO 29 YRS	91	137	11	239
30 TO 39 YRS	71	144	14	229
40 TO 49 YRS	45	71	4	120
50 TO 59 YRS	38	41	5	84
60 TO 69 YRS	17	26	1	44
70 TO 79 YRS	10	12	1	23
80+ YEARS	16	4	.	20
UNKNOWN AGE	32	83	1335	1450
TOTAL	747	873	1399	3019

TABLE 3D
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF SONNEI WERE REPORTED FOR 1995

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	146	149	52	347
1 TO 4 YRS	1611	1738	151	3500
5 TO 9 YRS	1252	1098	94	2444
10 TO 19 YRS	566	429	45	1040
20 TO 29 YRS	955	311	36	1302
30 TO 39 YRS	674	336	30	1040
40 TO 49 YRS	316	161	17	494
50 TO 59 YRS	169	87	9	265
60 TO 69 YRS	85	44	7	136
70 TO 79 YRS	46	33	2	81
80+ YEARS	25	13	3	41
UNKNOWN AGE	351	283	3487	4121
TOTAL	6196	4682	3933	14811

TABLE 3E
AGE AND SEX OF PERSONS FROM WHOM ISOLATES
OF UNKNOWN WERE REPORTED FOR 1995

	SEX			TOTAL
	FEMALE	MALE	UNKNOWN	
AGEGROUP				
< 1 YR	4	1	.	5
1 TO 4 YRS	68	63	1	132
5 TO 9 YRS	40	40	.	80
10 TO 19 YRS	15	19	1	35
20 TO 29 YRS	27	11	.	38
30 TO 39 YRS	21	18	.	39
40 TO 49 YRS	9	3	.	12
50 TO 59 YRS	5	3	.	8
60 TO 69 YRS	1	1	.	2
70 TO 79 YRS	3	.	.	3
80+ YEARS	3	1	.	4
UNKNOWN AGE	6	6	811	823
TOTAL	202	166	813	1181

TABLE 4

MEDIAN AGE OF PERSONS FROM WHOM ISOLATES OF SHIGELLA WERE REPORTED
BY SUBGROUP FOR 1981-1995

SUBGROUP	YEAR														
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOYDII	10	14	23	23	15	8	22	22	24	10	21	18	20	20	15
DYSENTERIAE	16	25	22	20	25	29	29	29	29	20	20	26	29	26	30
FLEXNERI	11	12	20	21	24	22	22	23	23	19	19	19	18	19	18
SONNEI	7	8	7	8	8	8	7	8	8	8	9	8	7	8	8
UNKNOWN	11	10	12	10	9	9	9	7	9	8	9	11	8	7	7

** MEDIAN CALCULATION EXCLUDES CALIFORNIA ISOLATES
AGE INFORMATION UNAVAILABLE FOR CALIFORNIA

TABLE 5

NUMBER OF REPORTED SHIGELLA ISOLATES BY RESIDENCE
FOR 1981-1995

RESIDENCE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
PRIVATE HOME	2392	2868	3003	1401	1952	1530	1490	1574	1533	1501	3344	854	1489	920	815	26666
INSTITUTION	39	51	40	16	32	103	13	9	8	1	.	3	35	6	14	370
INDIAN RESERVATION	64	64	54	67	44	85	108	448	525	345	89	42	56	111	376	2478
OTHER	1672	1247	1024	916	792	872	396	174	70	49	97	37	38	35	28	7447
UNKNOWN	10839	9307	10836	10315	9056	9682	14757	20131	13836	15410	12975	13987	17893	17711	18097	204832
TOTAL	15006	13537	14957	12715	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	241793

TABLE 5A
NUMBER OF REPORTED S. BOYDII ISOLATES BY RESIDENCE
FOR 1981-1995

RESIDENCE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
PRIVATE HOME	40	31	23	19	19	24	25	28	27	30	29	10	10	12	12	339
INSTITUTION	.	.	.	1	.	.	1	.	.	.	.	.	1	1	4	
INDIAN RESERVATION	.	.	.	.	2	2	.	.	.	.	.	.	.	.	5	9
OTHER	35	18	16	14	13	19	1	1	.	.	2	.	.	1	.	120
UNKNOWN	435	245	377	352	326	328	442	439	368	281	214	211	193	211	193	4750
TOTAL	510	294	416	386	358	373	356	472	466	398	312	224	221	207	229	5222

TABLE 5B

NUMBER OF REPORTED *S. DYSENTERIAE* ISOLATES BY RESIDENCE
FOR 1981-1995

RESIDENCE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
PRIVATE HOME	19	15	16	12	10	7	12	23	14	17	16	7	3	2	2	175
INSTITUTION	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	2
INDIAN RESERVATION	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1
OTHER	7	7	11	12	10	7	3	1	.	.	.	.	.	.	.	58
UNKNOWN	178	109	158	154	189	104	216	187	202	164	128	119	102	92	88	2190
TOTAL	204	131	185	179	209	118	232	211	216	181	145	126	105	94	90	2426

TABLE 5C

NUMBER OF REPORTED *S. FLEXNERI* ISOLATES BY RESIDENCE
FOR 1981-1995

RESIDENCE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
PRIVATE HOME	596	601	660	361	312	333	324	325	326	311	270	195	209	236	148	5207
INSTITUTION	29	16	1	4	1	8	3	1	.	.	.	1	.	2	.	66
INDIAN RESERVATION	38	36	20	42	39	80	85	108	97	93	43	30	44	61	104	920
OTHER	324	318	277	223	191	171	78	28	8	7	16	1	1	16	9	1668
UNKNOWN	3154	3202	3266	3122	2990	2975	3270	3876	3251	3620	3383	3024	2806	2788	2756	47483
TOTAL	4141	4173	4224	3752	3533	3567	3760	4338	4031	3712	3250	3061	3101	3019	55344	

TABLE 5D

NUMBER OF REPORTED S. SONNEI ISOLATES BY RESIDENCE
FOR 1981-1995

RESIDENCE	YEAR									TOTAL						
	1981	1982	1983	1984	1985	1986	1987	1988	1989							
PRIVATE HOME	1712	2183	2207	961	1575	1117	1070	1167	1146	1126	2955	639	1246	667	648	20419
INSTITUTION	10	35	39	10	31	84	9	7	8	1	.	3	34	4	11	286
INDIAN RESERVATION	17	25	34	24	5	2	20	248	407	248	45	12	12	50	267	1416
OTHER	1303	903	716	667	560	670	307	144	62	42	78	36	37	18	18	5561
UNKNOWN	6381	5088	6279	6128	4904	5432	9876	13462	8619	9699	7656	9416	13010	11707	13867	131524
TOTAL	9423	8234	9275	7790	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	159206

TABLE 5E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP
BY RESIDENCE FOR 1981-1995

RESIDENCE	YEAR									TOTAL						
	1981	1982	1983	1984	1985	1986	1987	1988	1989							
PRIVATE HOME	25	38	97	48	36	49	59	31	20	17	74	3	21	3	5	526
INSTITUTION	.	.	.	.	11	.	.	.	.	.	.	.	1	.	1	12
INDIAN RESERVATION	9	3	.	1	.	1	1	92	21	4	.	.	.	.	.	132
OTHER	3	1	4	.	18	5	7	.	.	1	.	.	.	1	1	40
UNKNOWN	691	663	756	559	647	843	1067	2164	1325	1559	1527	1214	1764	2931	1175	18885
TOTAL	728	705	857	608	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	19595

TABLE 6
NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1995

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
BOYDII	6	9	5	5	6	4	10	10	10	13	12	18	108
BOYDII 1	2	1	1	.	1	.	2	1	.	1	2	4	15
BOYDII 2	4	2	3	8	4	2	3	13	9	5	4	3	60
BOYDII 3	.	.	.	1	.	1	.	.	.	.	.	.	2
BOYDII 4	2	.	.	3	.	.	2	4	4	1	5	.	21
BOYDII 5	.	.	.	.	.	.	.	.	.	1	.	.	1
BOYDII 8	.	.	.	.	.	.	.	.	1	.	.	.	1
BOYDII 9	.	.	.	.	.	.	.	.	.	1	.	.	1
BOYDII 10	.	.	.	.	2	.	1	3	.	1	.	.	7
BOYDII 14	.	.	2	.	2	.	3	.	.	3	2	.	12
BOYDII 17	.	.	.	.	.	1	.	.	.	.	.	.	1
DYSENTERIAE	4	5	5	.	2	4	2	4	11	10	2	5	54
DYSENTERIAE 1	2	.	1	.	1	.	.	1	.	1	.	1	7
DYSENTERIAE 2	.	.	.	1	2	1	1	3	.	2	.	.	10
DYSENTERIAE 3	.	.	.	1	2	.	2	6	2	1	1	2	17
DYSENTERIAE 9	.	.	.	.	1	.	.	.	.	.	.	.	1
DYSENTERIAE 12	.	.	.	.	.	.	1	.	.	.	.	.	1
FLEXNERI	102	111	130	125	86	124	136	129	178	130	137	140	1528
FLEXNERI 1 UNSPECIFIED	28	19	22	29	14	27	41	46	57	49	39	41	412
FLEXNERI 1A	.	.	.	1	.	.	1	1	.	1	.	.	4
FLEXNERI 1B	3	1	.	2	.	2	.	6	.	2	1	.	17
FLEXNERI 2 UNSPECIFIED	40	40	24	25	38	27	34	50	40	25	12	27	382
FLEXNERI 2A	4	1	.	5	5	10	16	9	9	6	3	3	71
FLEXNERI 2B	.	1	3	.	1	.	3	2	4	1	1	1	17
FLEXNERI 3 UNSPECIFIED	19	21	19	14	25	15	23	20	33	25	14	18	246
FLEXNERI 3A	1	.	1	1	1	1	2	.	1	.	1	2	11
FLEXNERI 3B	1	1	1	.	1	.	.	.	2	.	.	.	6
FLEXNERI 3C	.	.	.	.	.	.	.	.	.	1	.	.	1
FLEXNERI 4 UNSPECIFIED	13	12	12	9	15	15	10	16	12	9	5	11	139
FLEXNERI 4A	.	2	1	1	.	.	1	.	2	1	2	2	12

(Continued)

TABLE 6
NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1995

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
FLEXNERI 5 UNSPECIFIED	4	1	5	6	4	9	7	4	10	5	4	3	62
FLEXNERI 6	7	6	2	11	9	6	13	14	14	10	11	4	107
FLEXNERI VARIANT Y	2	.	2	.	.	.	.	.	.	.	.	.	4
SONNEI	877	713	741	757	1026	1190	1385	1781	1882	1589	1447	1423	14811
UNKNOWN	45	53	52	78	96	94	94	118	174	150	103	124	1181
TOTAL	1166	999	1032	1083	1344	1533	1793	2241	2455	2044	1808	1832	19330

TABLE 7
NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1981-1995

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
BOYDII	191	172	165	134	192	232	322	404	454	442	333	281	3322
BOYDII 1	5	9	7	11	15	7	16	19	20	19	10	15	153
BOYDII 2	55	43	44	68	89	90	112	142	160	94	77	75	1049
BOYDII 3	2	1	1	2	4	1	.	.	1	.	1	.	13
BOYDII 4	13	6	11	15	12	20	23	34	35	18	18	11	216
BOYDII 5	4	7	4	8	6	4	4	8	8	6	3	1	63
BOYDII 6	.	.	.	.	.	1	3	2	1	1	.	.	8
BOYDII 7	1	2	.	1	.	.	1	3	1	1	.	1	11
BOYDII 8	.	.	1	.	1	1	.	2	1	1	1	2	10
BOYDII 9	.	.	1	1	2	.	.	1	2	4	2	.	13
BOYDII 10	8	4	4	5	10	12	23	28	18	18	8	13	151
BOYDII 11	.	.	3	2	2	.	1	1	2	2	.	1	14
BOYDII 12	1	1	1	.	3	.	.	4	3	1	1	1	16
BOYDII 13	1	.	.	.	.	.	.	1	.	.	.	.	2
BOYDII 14	8	6	5	9	11	13	25	28	20	15	10	11	161
BOYDII 15	.	.	1	.	.	.	.	1	1	.	.	.	3
BOYDII 16	.	.	.	1	.	.	.	.	.	.	.	.	1
BOYDII 17	.	.	.	.	.	1	.	.	.	.	.	.	1
BOYDII 18	2	.	.	2	3	.	.	1	1	2	2	2	15
DYSENTERIAE	99	106	95	124	81	125	134	171	238	208	228	111	1720
DYSENTERIAE 1	7	5	7	12	9	4	15	21	10	23	2	18	133
DYSENTERIAE 2	18	32	16	22	21	29	37	33	35	24	22	16	305
DYSENTERIAE 3	6	6	9	7	15	21	16	34	25	9	14	11	173
DYSENTERIAE 4	4	6	3	2	2	3	3	5	4	5	3	3	43
DYSENTERIAE 5	.	.	.	.	1	.	.	.	1	.	.	.	2
DYSENTERIAE 6	.	.	.	.	1	.	2	1	1	.	.	.	5
DYSENTERIAE 7	.	1	.	1	2	2	.	1	1	1	.	.	9
DYSENTERIAE 8	.	1	.	.	1	.	1	.	.	.	1	.	4
DYSENTERIAE 9	1	1	.	.	5	2	4	2	1	3	4	2	25
DYSENTERIAE 10	.	.	.	.	.	.	.	.	.	.	1	.	1

(Continued)

TABLE 7
NUMBER OF REPORTED SHIGELLA ISOLATES BY MONTH FOR 1981-1995

SEROTYPE	MONTH												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
DYSENTERIAE 11	.	.	.	.	.	.	.	1	.	.	.	.	1
DYSENTERIAE 12	.	.	.	.	.	.	1	1	.	1	.	.	3
DYSENTERIAE 13	.	.	.	.	.	.	1	.	1	.	.	.	2
FLEXNERI	2172	2135	2406	2344	2309	2246	2927	3263	3503	3332	2776	2874	32287
FLEXNERI 1 UNSPECIFIED	297	288	315	287	332	339	438	497	502	526	357	316	4494
FLEXNERI 1A	62	66	80	90	71	72	95	114	108	94	68	65	985
FLEXNERI 1B	67	79	68	58	74	105	97	204	205	111	105	82	1255
FLEXNERI 2 UNSPECIFIED	362	347	342	331	439	403	507	582	496	432	355	357	4953
FLEXNERI 2A	172	191	193	214	201	226	298	328	289	218	185	173	2688
FLEXNERI 2B	31	37	37	23	22	33	34	43	60	40	35	21	416
FLEXNERI 3 UNSPECIFIED	159	164	165	186	204	159	231	222	235	229	169	185	2308
FLEXNERI 3A	89	107	104	95	106	103	148	143	168	128	89	100	1380
FLEXNERI 3B	8	7	12	9	9	10	13	23	6	9	25	10	141
FLEXNERI 3C	4	7	5	14	8	9	15	5	14	5	8	10	104
FLEXNERI 4 UNSPECIFIED	121	85	104	125	140	131	160	170	169	130	112	124	1571
FLEXNERI 4A	34	42	51	75	51	51	60	75	63	62	47	49	660
FLEXNERI 4B	6	2	2	4	6	7	9	3	6	2	4	2	53
FLEXNERI 5 UNSPECIFIED	20	17	21	21	24	34	33	27	38	27	18	23	303
FLEXNERI 6	116	102	97	117	107	132	204	198	228	167	163	97	1728
FLEXNERI VARIANT X	.	1	1	.	.	.	.	.	.	1	6	.	9
FLEXNERI VARIANT Y	3	.	3	.	.	.	.	1	1	.	.	1	9
SONNEI	9003	7838	8613	8645	9466	11064	14272	20324	20707	19380	15968	13926	159206
UNKNOWN	1093	1006	1091	1174	1465	1468	1822	2137	2386	2206	1843	1904	19595
TOTAL	14245	12930	14088	14239	15522	17160	22107	29308	30229	27997	23074	20894	241793

TABLE 8

NUMBER OF REPORTED SHIGELLA ISOLATES BY REGION
FOR 1981-1995

REGION	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	TOTAL
NEW ENGLAND	850	1226	543	354	861	729	645	651	546	646	1757	555	520	414	586	10883
MID-ATLANTIC	803	1226	2050	1094	1607	1263	2331	1179	1310	1595	1263	1071	1215	1562	1758	21327
EAST NORTH CENTRAL	1364	1484	1881	1863	1494	1550	3816	3597	2673	2096	1643	2154	2816	1970	2105	32506
WEST NORTH CENTRAL	503	402	530	495	387	330	671	1151	1359	630	403	589	828	1368	1391	11037
SOUTH ATLANTIC	1815	1084	990	997	683	686	1425	2562	2568	1894	1565	1727	2860	4790	2181	27827
EAST SOUTH CENTRAL	143	131	155	114	188	60	219	683	482	799	915	305	768	1023	802	6787
WEST SOUTH CENTRAL	2138	1776	1619	1263	1218	1611	1671	2535	1408	1832	1409	1453	2943	1771	1944	26591
MOUNTAIN	1469	1356	1525	1150	1223	1137	1174	1692	1161	1655	2248	1174	1348	1436	2713	22461
PACIFIC	5921	4852	5664	5385	4215	4906	4812	8286	4465	6159	5302	5895	6213	4449	5850	82374
TOTAL	15006	13537	14957	12715	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	241793

TABLE 8A

NUMBER OF REPORTED S. SONNEI ISOLATES BY REGION
FOR 1981-1995

REGION	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	TOTAL
NEW ENGLAND	635	1050	383	214	713	596	491	481	358	448	1573	435	428	302	456	8563
MID-ATLANTIC	521	941	1629	823	1128	772	2030	883	1015	1321	1020	880	985	1325	1527	16800
EAST NORTH CENTRAL	1003	1099	1470	1458	1110	1123	3279	2685	2061	1443	1176	1671	2440	1707	1773	25498
WEST NORTH CENTRAL	325	294	414	354	246	147	503	870	1084	446	255	478	698	1166	1281	8561
SOUTH ATLANTIC	1677	750	705	704	450	462	1099	2155	2268	1535	1210	1451	2280	2695	1966	21407
EAST SOUTH CENTRAL	122	109	124	103	179	52	136	523	319	513	587	152	341	649	511	4420
WEST SOUTH CENTRAL	1477	1101	1071	767	817	1161	1293	2103	1022	1415	1072	1268	2765	1595	1721	20648
MOUNTAIN	662	654	654	575	554	571	470	921	522	1124	1601	722	824	920	2180	12954
PACIFIC	3001	2236	2825	2792	1878	2421	1981	4407	1593	2871	2240	3049	3578	2087	3396	40355
TOTAL	9423	8234	9275	7790	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	159206

TABLE 8B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY REGION
FOR 1981-1995

REGION	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
NEW ENGLAND	167	139	142	114	128	93	109	127	150	122	94	107	92	106	115	1805
MID-ATLANTIC	272	271	335	256	377	341	278	257	269	254	227	177	211	213	206	3944
EAST NORTH CENTRAL	292	342	345	344	326	314	361	422	439	465	339	330	287	238	289	5133
WEST NORTH CENTRAL	155	82	90	103	108	168	134	156	168	125	115	77	67	121	71	1740
SOUTH ATLANTIC	91	121	93	102	90	116	154	143	101	156	124	137	173	343	196	2140
EAST SOUTH CENTRAL	21	19	30	10	8	6	9	8	9	10	8	2	4	18	7	169
WEST SOUTH CENTRAL	555	618	491	435	346	380	328	376	333	367	280	170	136	141	188	5144
MOUNTAIN	685	617	774	509	548	496	556	503	472	381	491	371	382	353	464	7602
PACIFIC	1903	1964	1924	1879	1602	1653	1831	2346	1741	2151	2034	1879	1709	1568	1483	27667
TOTAL	4141	4173	4224	3752	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	55344

TABLE 8C

NUMBER OF REPORTED S. BOYDII ISOLATES BY REGION
FOR 1981-1995

REGION	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
NEW ENGLAND	12	9	7	10	8	6	14	7	16	17	12	4	.	5	11	138
MID-ATLANTIC	4	6	8	16	16	16	21	17	10	10	6	11	15	12	176	
EAST NORTH CENTRAL	43	17	42	38	35	37	28	64	42	29	20	16	30	19	31	491
WEST NORTH CENTRAL	6	4	6	4	1	1	2	6	5	5	7	3	.	7	6	63
SOUTH ATLANTIC	18	10	11	2	3	6	7	5	10	8	8	5	10	27	7	137
EAST SOUTH CENTRAL	.	1	1	.	1	2	2	1	1	.	1	.	.	.	.	11
WEST SOUTH CENTRAL	85	49	47	35	33	54	36	39	37	35	44	11	33	24	27	589
MOUNTAIN	79	46	48	34	66	43	59	52	48	47	30	14	14	18	32	630
PACIFIC	263	152	246	254	196	209	192	276	290	246	181	164	123	92	103	2987
TOTAL	510	294	416	386	358	373	356	472	466	398	312	224	221	207	229	52222

TABLE 8D

NUMBER OF REPORTED *S. DYSENTERIAE* ISOLATES BY REGION
FOR 1981-1995

REGION	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
NEW ENGLAND	13	9	2	6	5	4	4	12	9	8	6	6	.	.	3	87
MID-ATLANTIC	2	6	7	16	11	7	18	9	9	6	8	2	6	6	120	
EAST NORTH CENTRAL	17	16	22	20	20	7	27	21	23	15	11	21	4	6	11	241
WEST NORTH CENTRAL	3	3	6	2	3	3	8	8	7	3	1	6	1	2	1	57
SOUTH ATLANTIC	8	3	15	4	1	2	4	4	2	5	6	4	4	5	2	69
EAST SOUTH CENTRAL	.	.	1	1	1	1	2	.	2	.	1	1	1	1	.	10
WEST SOUTH CENTRAL	18	8	8	26	20	13	12	17	15	14	10	2	9	10	5	187
MOUNTAIN	9	14	20	19	14	9	10	8	25	7	12	5	12	9	6	179
PACIFIC	134	72	105	95	129	68	159	121	126	118	93	73	72	55	56	1476
TOTAL	204	131	185	179	209	118	232	211	216	181	145	126	105	94	90	2426

TABLE 8E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP
BY REGION FOR 1981-1995

REGION	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
NEW ENGLAND	23	19	9	10	7	30	27	24	13	51	72	3	.	1	1	290
MID-ATLANTIC	4	2	71	.	70	123	.	.	1	.	.	6	3	7	287	
EAST NORTH CENTRAL	9	10	2	3	3	69	121	405	108	144	97	116	55	.	1	1143
WEST NORTH CENTRAL	14	19	14	32	29	11	24	111	95	51	25	25	62	72	32	616
SOUTH ATLANTIC	21	200	166	185	139	100	161	255	187	190	217	130	393	1720	10	4074
EAST SOUTH CENTRAL	.	2	.	.	.	71	148	153	273	320	149	422	355	284	2177	
WEST SOUTH CENTRAL	3	.	2	.	2	3	2	.	1	1	3	2	.	1	3	23
MOUNTAIN	34	25	29	13	41	18	79	208	94	96	114	62	116	136	31	1096
PACIFIC	620	428	564	365	410	555	649	1136	715	773	754	730	731	647	812	9889
TOTAL	728	705	857	608	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	19595

TABLE 9

NUMBER OF REPORTED SHIGELLA SUBGROUP ISOLATES BY YEAR FOR 1981 - 1995

SUBGROUP	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	TOTAL
BOYDII	510	294	416	386	358	373	356	472	466	398	312	224	221	207	229	5222
DYSENTERIAE	204	131	185	179	209	118	232	211	216	181	145	126	105	94	90	2426
FLEXNERI	4141	4173	4224	3752	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	55344
SONNEI	9423	8234	9275	7790	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	159206
UNKNOWN	728	705	857	608	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	19595
TOTAL	15006	13537	14957	12715	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	241793

TABLE 10

NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
ALABAMA	63	77	111	78	155	50	122	444	332	514	450	160	341	479	383	3759
ALASKA	33	22	3	11	19	2	5	9	14	7	30	19	21	14	10	219
ARIZONA	498	463	788	450	599	513	512	365	291	498	577	399	369	401	815	7538
ARKANSAS	48	22	34	14	22	27	44	94	43	20	91	18	100	61	96	734
CALIFORNIA	5101	4306	5091	4873	3845	4489	4341	7883	4132	5703	4473	5217	5175	3757	5347	73733
COLORADO	291	305	230	277	101	158	290	371	411	385	216	364	614	529	485	5027
CONNECTICUT	381	823	173	101	107	112	203	162	233	192	108	131	212	146	148	3232
DELAWARE	3	3	.	2	25	1	.	20	60	109	4	7	60	11	125	430
DISTRICT OF COLUMBIA	.	.	1	.	.	188	240	142	12	59	45	63	26	19	199	994
FLORIDA	206	120	85	106	181	64	35	487	500	199	378	263	248	721	319	3912
GEORGIA	378	325	245	211	196	133	331	657	518	620	532	560	494	2062	176	7438
HAWAII	207	99	146	166	154	81	82	59	69	60	80	119	89	193	102	1706
IDAHO	133	80	18	25	5	.	.	.	1	2	.	13	16	30	74	397
ILLINOIS	847	980	1051	1008	973	1020	2516	1593	883	932	759	910	1142	1030	1215	16859
INDIANA	109	46	226	247	86	76	296	925	306	350	334	209	173	181	103	3667
IOWA	41	69	67	98	19	22	108	320	82	47	30	42	45	323	240	1553
KANSAS	105	79	62	52	63	65	21	52	82	62	56	83	110	57	106	1055
KENTUCKY	33	13	23	29	16	10	2	34	16	11	204	28	45	83	86	633
LOUISIANA	433	232	192	242	127	279	440	517	325	214	120	87	303	314	378	4203
MAINE	14	34	9	12	12	6	7	7	9	5	4	9	2	4	.	134
MARYLAND	67	121	227	152	95	101	428	540	151	147	50	276	262	201	226	3044
MASSACHUSETTS	348	289	314	197	683	541	324	325	244	341	1387	240	256	209	288	5986

(Continued)

TABLE 10

NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1981-1995

STATE	YEAR									TOTAL						
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
MICHIGAN	169	167	179	173	261	113	283	473	772	342	193	494	645	329	454	5047
MINNESOTA	133	64	91	111	175	66	163	349	426	122	80	90	236	467	166	2739
MISSISSIPPI	47	41	21	7	17	.	95	205	134	274	261	117	382	461	333	2395
MISSOURI	152	42	227	151	59	45	291	316	213	170	139	273	336	292	609	3315
MONTANA	31	41	19	15	51	26	42	258	97	46	136	120	12	2	203	1099
NEBRASKA	7	17	2	1	3	11	3	.	1	5	1	6	1	2	4	64
NEVADA	31	16	30	4	2	8	6	4	27	8	2	6	3	2	19	168
NEW HAMPSHIRE	11	13	16	13	28	39	28	54	27	63	40	6	10	10	79	437
NEW JERSEY	247	458	384	389	358	158	268	216	216	202	226	220	274	388	675	4679
NEW MEXICO	354	320	327	304	374	300	273	606	254	462	303	164	272	235	408	4956
NEW YORK	416	291	1197	404	857	723	1785	475	423	770	361	451	453	697	548	9851
NORTH CAROLINA	164	318	254	315	99	110	88	306	932	555	228	307	1089	1130	593	6488
NORTH DAKOTA	29	32	7	24	19	19	25	28	193	143	25	13	13	59	126	755
OHIO	116	129	189	239	114	54	127	128	403	212	97	77	585	276	260	3006
OKLAHOMA	154	103	70	55	128	127	97	75	93	187	130	97	214	85	132	1747
OREGON	151	144	70	99	55	46	51	50	51	101	350	144	108	87	113	1620
PENNSYLVANIA	140	477	469	301	392	382	278	488	671	623	676	400	488	477	535	6797
RHODE ISLAND	93	55	23	19	26	25	72	34	28	30	214	163	32	43	65	922
SOUTH CAROLINA	35	63	53	107	36	14	99	83	112	110	38	68	113	180	115	1226
SOUTH DAKOTA	36	99	74	58	49	102	60	86	362	81	72	82	87	168	140	1556
TENNESSEE	209	200	193	167	192	101	321	1002	256	257	193	561	1049	709	440	5850
TEXAS	1294	1219	1130	785	749	1077	769	847	691	1154	875	690	1277	602	898	14057

(Continued)

TABLE 10

NUMBER OF REPORTED SHIGELLA ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
UTAH	119	131	105	72	91	132	51	88	80	254	1014	108	54	235	705	3239
VERMONT	3	12	8	12	5	6	11	69	5	15	4	6	8	2	6	172
VIRGINIA	904	91	111	99	33	57	169	305	260	74	257	165	530	466	401	3922
WASHINGTON	429	281	354	236	142	288	333	285	199	288	369	396	820	398	278	5096
WEST VIRGINIA	58	43	14	5	18	18	35	22	23	21	33	18	38	-	27	373
WISCONSIN	123	162	236	196	60	287	594	478	309	260	260	464	271	154	73	3927
WYOMING	12	.	8	3	.	.	.	.	.	.	.	.	8	2	4	37
TOTAL	15006	13537	14957	12715	11876	12272	16764	22336	15972	17306	16505	14923	19511	18783	19330	241793

TABLE 10A

NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
ALABAMA	49	67	87	69	150	42	69	391	262	365	361	111	200	356	281	2860
ALASKA	11	3	2	7	16	.	4	6	5	2	26	17	13	10	10	132
ARIZONA	197	147	288	253	212	169	202	112	73	309	294	166	149	196	523	3290
ARKANSAS	31	15	28	11	18	23	42	87	38	19	89	16	99	58	96	670
CALIFORNIA	2471	1905	2496	2506	1714	2176	1670	4209	1448	2632	1632	2580	2806	1657	3126	35028
COLORADO	157	214	152	145	47	92	124	228	236	255	112	245	444	329	365	3145
CONNECTICUT	337	795	141	72	81	95	172	132	207	172	93	101	199	117	127	2841
DELAWARE	3	1	.	1	25	.	.	20	60	108	3	6	58	8	122	415
DISTRICT OF COLUMBIA	.	.	1	.	.	146	205	109	7	39	20	45	12	4	166	754
FLORIDA	166	92	63	103	178	58	27	480	495	188	371	252	237	694	305	3709
GEORGIA	349	135	60	23	43	43	155	392	313	399	293	404	68	149	131	2957
HAWAII	128	46	83	91	71	44	34	18	24	22	23	46	26	125	44	825
IDAHO	62	37	8	12	1	.	.	.	.	1	.	10	9	17	72	229
ILLINOIS	623	726	773	745	674	767	2231	1238	559	567	524	674	910	860	995	12866
INDIANA	102	35	193	220	75	56	219	545	202	224	238	168	160	161	85	2683
IOWA	17	45	48	80	7	15	90	200	51	29	18	27	34	263	231	1155
KANSAS	89	70	44	36	49	54	12	43	73	48	41	73	104	47	100	883
KENTUCKY	33	9	22	27	15	10	.	33	14	9	200	27	43	76	84	602
LOUISIANA	357	147	134	195	84	249	407	492	304	195	103	78	288	304	365	3702
MAINE	4	32	2	5	11	3	5	6	5	3	3	5	2	3	.	89
MARYLAND	61	85	199	122	65	64	391	516	130	115	35	239	213	134	194	2563
MASSACHUSETTS	219	181	216	116	592	474	243	223	125	227	1300	176	187	143	206	4628

(Continued)

TABLE 10A

NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1981-1995

STATE	YEAR									TOTAL						
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
MICHIGAN	124	128	140	133	224	77	225	422	706	284	142	408	590	287	387	4277
MINNESOTA	64	42	52	60	122	30	114	305	314	56	42	54	166	385	133	1939
MISSISSIPPI	40	33	15	7	14	.	67	99	43	139	26	14	98	217	146	958
MISSOURI	128	35	217	142	54	33	274	291	187	144	117	264	329	280	599	3094
MONTANA	6	11	4	3	3	8	19	108	66	14	122	118	11	1	196	690
NEBRASKA	.	16	2	1	1	5	2	.	1	.	1	5	1	2	4	41
NEVADA	15	15	25	3	1	6	4	.	21	3	.	4	2	2	13	114
NEW HAMPSHIRE	9	6	6	4	16	11	10	38	5	29	29	3	7	8	76	257
NEW JERSEY	187	406	321	329	304	120	223	150	160	155	180	177	222	331	599	3864
NEW MEXICO	166	154	136	137	242	216	107	434	100	333	184	85	176	175	327	2972
NEW YORK	234	134	901	241	479	362	1578	313	267	602	231	347	321	557	427	6994
NORTH CAROLINA	145	284	230	289	71	92	61	276	911	514	200	284	1059	1105	560	6081
NORTH DAKOTA	18	20	4	20	7	4	11	13	176	135	20	5	5	37	95	570
OHIO	88	108	168	214	94	42	103	110	377	187	84	68	575	266	246	2730
OKLAHOMA	140	81	54	27	104	88	78	63	81	176	116	87	209	77	116	1497
OREGON	84	100	32	58	15	32	26	22	15	59	317	116	53	50	73	1052
PENNSYLVANIA	100	401	407	253	345	290	229	420	588	564	609	356	442	437	501	5942
RHODE ISLAND	65	30	12	11	10	9	53	24	13	14	144	147	27	29	45	633
SOUTH CAROLINA	27	53	48	99	33	10	93	74	107	100	31	58	111	172	110	1126
SOUTH DAKOTA	9	66	47	15	6	6	.	18	282	34	16	50	59	152	119	879
TENNESSEE	180	184	173	156	179	85	304	984	248	181	547	1028	692	418	5607	
TEXAS	769	674	378	432	716	462	477	351	777	583	540	1141	464	726	9172	

(Continued)

TABLE 10A

NUMBER OF REPORTED S. SONNEI ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	TOTAL
UTAH	58	76	40	20	48	80	14	39	26	209	889	94	30	200	680	2503
VERMONT	1	6	6	6	3	4	8	58	3	3	4	3	6	2	2	115
VIRGINIA	889	81	97	67	23	41	141	274	234	55	232	148	498	429	351	3560
WASHINGTON	307	182	212	130	62	169	247	152	101	156	242	290	680	245	143	3318
WEST VIRGINIA	37	19	7	.	12	8	26	14	11	17	25	15	24	.	27	242
WISCONSIN	66	102	196	146	43	181	501	370	217	181	188	353	205	133	60	2942
WYOMING	1	.	1	2	.	.	.	.	.	.	.	.	3	.	4	11
TOTAL	9423	8234	9275	7790	7075	7305	11282	15028	10242	11116	10734	10106	14339	12446	14811	159206

TABLE 10B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
ALABAMA	14	9	23	8	4	6	6	3	3	6	3	.	2	11	5	103
ALASKA	22	19	1	4	2	1	1	3	8	2	4	2	6	4	.	79
ARIZONA	258	293	462	175	337	312	261	208	181	150	259	225	212	197	263	3793
ARKANSAS	17	6	6	3	3	4	1	6	3	1	1	2	1	2	.	56
CALIFORNIA	1633	1756	1702	1669	1410	1497	1689	2175	1577	1957	1831	1689	1478	1323	1269	24655
COLORADO	105	80	66	115	46	57	106	82	96	65	71	52	44	61	87	1133
CONNECTICUT	38	22	32	24	23	15	24	25	21	17	13	26	13	25	18	336
DELAWARE	.	1	.	.	.	.	.	.	.	1	1	1	1	2	3	10
DISTRICT OF COLUMBIA	.	.	.	.	.	20	23	30	4	19	24	18	13	15	28	194
FLORIDA	21	22	20	3	3	6	7	7	4	9	4	8	9	5	12	140
GEORGIA	25	16	20	7	17	17	28	13	29	31	27	32	44	198	41	545
HAWAII	77	52	57	74	82	36	47	41	42	36	57	72	63	68	57	861
IDAHO	71	38	9	13	4	.	.	.	1	.	1	3	7	13	2	161
ILLINOIS	190	220	240	230	260	213	253	285	283	340	222	208	204	157	192	3497
INDIANA	4	11	24	21	10	18	19	25	29	21	24	8	12	17	17	260
IOWA	17	5	9	14	8	5	11	24	18	8	8	7	5	11	9	159
KANSAS	14	9	17	15	14	9	6	9	9	12	13	7	6	9	5	154
KENTUCKY	.	2	1	2	1	.	1	1	2	2	4	.	2	6	2	26
LOUISIANA	71	82	57	46	40	29	33	22	21	19	16	8	13	10	12	479
MAINE	8	2	7	7	1	3	2	.	4	.	1	4	.	1	.	40
MARYLAND	6	29	18	28	30	34	35	23	20	31	11	31	45	61	32	434
MASSACHUSETTS	112	97	93	72	88	61	73	89	103	95	71	60	69	66	73	1222

(Continued)

TABLE 10B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
MICHIGAN	31	35	36	37	27	34	53	47	53	50	45	82	51	39	59	679
MINNESOTA	65	19	27	20	30	27	27	23	32	26	20	20	16	75	28	455
MISSISSIPPI	7	8	6	.	3	.	2	4	4	2	1	2	.	1	.	40
MISSOURI	20	5	8	7	5	11	15	21	21	26	18	8	7	10	8	190
MONTANA	4	11	4	7	14	5	4	7	2	7	9	1	1	1	6	83
NEBRASKA	7	1	.	2	6	1	.	.	5	.	.	.	.	.	.	22
NEVADA	13	1	5	.	1	2	2	4	6	4	1	2	.	.	5	46
NEW HAMPSHIRE	2	4	5	2	3	3	3	4	9	2	2	3	3	2	3	50
NEW JERSEY	57	45	58	53	51	34	41	58	51	44	43	42	42	49	69	737
NEW MEXICO	175	150	177	158	114	74	151	165	145	124	110	75	89	52	78	1837
NEW YORK	175	153	217	156	282	231	192	144	142	155	122	93	125	128	107	2422
NORTH CAROLINA	16	34	22	25	28	17	25	27	18	39	26	23	30	22	32	384
NORTH DAKOTA	5	10	3	4	6	15	14	12	16	5	1	3	5	.	.	99
OHIO	25	21	20	23	16	12	18	15	24	21	10	9	6	5	9	234
OKLAHOMA	14	22	16	25	22	35	16	11	9	10	11	9	4	5	14	223
OREGON	61	43	38	33	36	14	17	18	27	39	31	19	47	32	37	492
PENNSYLVANIA	40	73	60	47	44	76	45	55	76	55	62	42	44	36	30	785
RHODE ISLAND	6	9	4	6	11	10	5	8	12	3	7	13	5	12	19	130
SOUTH CAROLINA	7	10	5	8	2	4	6	9	5	10	7	9	1	7	5	95
SOUTH DAKOTA	27	33	26	43	43	95	60	67	72	43	55	32	28	16	21	661
TENNESSEE	28	16	17	10	13	11	13	17	6	8	12	14	13	21	213	
TEXAS	425	492	395	351	268	301	265	320	294	329	240	137	104	111	141	4173

(Continued)

TABLE 10B

NUMBER OF REPORTED S. FLEXNERI ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	TOTAL
UTAH	58	44	47	41	32	46	32	37	42	30	41	13	24	29	23	539
VERMONT	1	5	1	3	2	1	2	1	1	5	.	1	2	.	2	27
VIRGINIA	14	9	7	30	8	16	27	30	19	15	24	15	28	33	43	318
WASHINGTON	110	94	126	99	72	105	77	109	87	117	111	97	115	141	120	1580
WEST VIRGINIA	2	.	1	1	2	2	3	4	2	1	.	.	2	.	.	20
WISCONSIN	42	55	25	33	13	37	18	50	50	33	38	23	14	20	12	463
WYOMING	1	.	4	.	.	.	.	.	.	.	.	5	.	.	.	10
TOTAL	4141	4173	4224	3752	3533	3567	3760	4338	3682	4031	3712	3250	3061	3101	3019	55344

TABLE 10C

NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
ALABAMA	.	.	1	1	.	1	1	1	.	.	.	.	.	.	.	6
ALASKA	.	.	.	1	.	.	.	.	2	.	.	1	.	.	.	4
ARIZONA	38	16	24	21	47	30	43	38	30	35	17	6	5	5	22	377
ARKANSAS	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	2
CALIFORNIA	250	147	234	248	185	201	181	258	274	232	171	151	105	81	91	2809
COLORADO	23	10	9	5	2	6	3	7	11	5	4	3	3	3	5	99
CONNECTICUT	2	3	.	2	2	1	5	2	1	1	2	2	.	3	3	29
DELAWARE	.	.	.	.	1	.	.	.	.	.	.	.	1	1	.	3
DISTRICT OF COLUMBIA	.	.	.	.	1	1	1	1	.	1	.	.	.	.	2	7
FLORIDA	12	6	2	.	.	.	.	.	1	1	2	.	.	.	.	24
GEORGIA	3	1	5	.	1	2	2	.	1	2	2	1	2	19	.	41
HAWAII	1	.	2	.	1	1	.	1	.	.	1	.	.	.	1	9
IDAHO	.	3	1	.	.	.	.	.	.	.	.	.	.	.	.	4
ILLINOIS	30	14	27	22	23	35	19	54	27	15	9	9	26	10	18	338
INDIANA	1	7	4	1	.	2	1	2	2	3	.	.	2	1	1	26
IOWA	3	1	.	1	1	.	.	1	1	1	.	1	.	1	.	11
KANSAS	1	.	1	.	.	2	.	.	2	2	.	1	1	1	1	10
KENTUCKY	.	1	.	.	.	.	.	.	.	.	1	.	.	.	2	
LOUISIANA	2	3	1	.	2	1	.	2	.	.	1	.	2	.	1	15
MAINE	1	.	.	.	.	.	.	.	.	1	.	.	.	.	2	
MARYLAND	.	3	1	.	.	1	2	.	.	1	2	2	4	3	.	19
MASSACHUSETTS	7	4	3	7	2	4	7	5	11	14	10	2	.	.	6	82

(Continued)

TABLE 10C

NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL						
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		
MICHIGAN	5	2	3	2	7	2	1	1	5	5	3	2	3	2	7	50	
MINNESOTA	1	.	3	1	.	.	.	5	1	2	1	1	.	3	4	22	
MISSISSIPPI	.	.	.	.	.	.	1	1	.	1	.	.	.	.	3	3
MISSOURI	1	2	1	2	.	.	.	.	2	.	3	1	.	2	1	15
MONTANA	.	.	.	.	.	1	.	.	.	1	.	.	.	.	.	2
NEVADA	2	.	.	1	.	.	.	.	.	1	1	.	.	.	1	6
NEW HAMPSHIRE	.	.	2	.	3	.	.	.	1	.	.	.	.	.	.	6
NEW JERSEY	1	3	4	4	1	2	2	7	3	3	1	.	3	5	3	42	
NEW MEXICO	12	11	12	6	14	6	11	5	5	4	7	4	6	6	3	112	
NEW YORK	3	1	3	3	14	2	10	12	11	6	4	6	6	7	7	95	
NORTH CAROLINA	2	.	1	3	.	1	.	.	.	2	1	12
NORTH DAKOTA	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1
OHIO	1	.	1	2	2	.	1	1	1	1	3	3	.	1	4	4	24
OKLAHOMA	.	.	2	.	3	3	.	1	1	1	.	.	1	3	1	15	
OREGON	.	.	2	3	.	4	1	6	2	1	6	7	3	2	37		
PENNSYLVANIA	.	2	1	1	1	12	4	2	3	1	5	.	2	3	2	39	
RHODE ISLAND	2	2	1	.	1	.	2	.	2	1	.	.	1	1	1	14	
SOUTH CAROLINA	.	.	.	.	.	.	.	.	.	.	.	1	1	.	2	
SOUTH DAKOTA	.	.	1	.	.	1	.	.	1	.	1	.	.	.	4		
TENNESSEE	1	.	1	.	4	1	.	1	1	.	.	4	1	.	14		
TEXAS	82	45	45	33	31	46	32	36	35	33	43	11	26	20	25	543	
UTAH	3	6	2	1	3	.	2	2	2	1	1	.	3	1	28		

(Continued)

TABLE 10C

NUMBER OF REPORTED S. BOYDII ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
VERMONT	.	.	1	1	.	1	.	.	1	.	.	.	.	.	1	5
VIRGINIA	1	.	2	1	2	.	1	1	7	3	.	1	2	2	4	27
WASHINGTON	12	5	10	4	6	7	6	17	9	10	9	6	10	8	9	128
WEST VIRGINIA	.	.	.	.	.	1	.	.	1	.	.	.	.	.	.	2
WISCONSIN	6	1	4	8	2	.	5	7	7	4	2	5	.	1	1	53
WYOMING	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	2
TOTAL	510	294	416	386	358	373	356	472	466	398	312	224	221	207	229	5222

TABLE 10D

NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL				
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ALABAMA	.	.	.	1	1	.	2	.	2	.	1	1	.	.	8
ALASKA	.	.	.	.	1	.	.	1	.	.	1	.	.	.	3
ARIZONA	5	6	14	1	3	2	6	.	7	4	6	2	3	3	46
ARKANSAS	.	.	.	.	.	.	.	1	.	.	.	.	1	.	2
CALIFORNIA	129	71	99	91	127	62	152	114	120	110	86	69	65	51	1396
COLORADO	2	1	3	12	5	3	4	6	10	1	3	2	7	2	63
CONNECTICUT	2	2	.	3	1	.	1	3	4	2	.	2	.	.	20
DELAWARE	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1
DISTRICT OF COLUMBIA	.	.	.	.	.	.	.	.	.	1	.	.	.	.	1
FLORIDA	7	.	.	.	.	.	.	.	.	1	.	.	.	.	13
GEORGIA	.	1	1	1	1	.	.	.	1	1	1	2	1	.	14
HAWAII	1	1	1	1	1	.	.	.	1	2	.	.	.	.	7
ILLINOIS	4	12	9	8	13	5	11	15	14	8	4	18	2	3	136
INDIANA	2	.	2	2	.	2	1	.	2	1	2	2	1	1	18
IOWA	1	2	2	.	.	1	.	1	.	.	.	.	.	.	6
KANSAS	1	.	1	.	1	.	2	1	.	.	3	.	.	.	8
KENTUCKY	.	.	.	.	.	.	1	.	.	.	.	.	1	.	2
LOUISIANA	3	.	.	1	1	.	.	1	.	.	.	.	.	.	6
MAINE	1	.	.	.	.	.	.	1	.	.	.	.	.	.	3
MARYLAND	.	1	8	2	.	1	.	1	1	.	2	2	.	.	18
MASSACHUSETTS	10	7	2	2	1	2	1	8	5	5	6	2	.	.	53
MICHIGAN	9	2	.	1	3	.	3	2	5	3	3	.	1	1	34

(Continued)

TABLE 10D
NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
MINNESOTA	1	1	4	1	3	1	4	2	3	2	.	.	1	2	1	26
MISSOURI	.	.	.	.	.	.	2	4	3	.	1	.	.	.	.	10
MONTANA	.	1	.	.	.	.	.	.	1	.	.	1	.	.	.	3
NEBRASKA	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1
NEVADA	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	2
NEW HAMPSHIRE	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1
NEW JERSEY	2	4	1	3	2	1	2	1	2	.	2	1	2	1	.	24
NEW MEXICO	1	5	2	3	4	4	.	2	4	1	2	.	1	2	.	31
NEW YORK	.	1	5	4	13	6	5	6	3	6	4	5	.	4	4	66
NORTH CAROLINA	1	.	1	.	.	.	2	.	.	2	1	.	.	.	.	7
NORTH DAKOTA	.	.	.	.	.	.	.	1	1	.	.	.	2	.	.	4
OHIO	2	.	.	2	.	3	2	1	.	.	.	.	.	1	.	11
OKLAHOMA	.	.	1	2	1	.	1	2	.	2	1	.	.	.	.	10
OREGON	4	.	1	.	.	4	.	2	1	.	1	1	1	2	1	17
PENNSYLVANIA	.	1	1	4	.	11	4	3	.	2	.	1	2	.	1	30
RHODE ISLAND	.	.	3	2	2	.	.	.	.	2	.	.	.	.	.	9
SOUTH CAROLINA	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1
SOUTH DAKOTA	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	2
TENNESSEE	.	1	1	.	.	3	1	1	.	.	.	.	3	2	.	12
TEXAS	15	8	7	23	17	12	9	14	11	14	8	1	6	7	5	157
UTAH	.	1	.	2	2	.	.	.	3	1	1	.	1	.	.	11
VERMONT	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1

(Continued)

TABLE 10D

NUMBER OF REPORTED S. DYSENTERIAE ISOLATES BY STATE FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
VIRGINIA	.	1	5	1	.	.	.	.	1	1	.	1	1	2	2	14
WASHINGTON	.	.	5	2	2	5	3	7	2	5	7	3	5	2	5	53
WISCONSIN	.	2	11	9	2	.	9	2	1	3	2	1	.	.	.	42
WYOMING	.	.	1	1	.	.	.	.	.	.	.	.	1	1	.	3
TOTAL	204	131	185	179	209	118	232	211	216	181	145	126	105	94	90	2426

TABLE 10E
NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
ALABAMA	.	1	.	.	.	46	47	66	141	86	48	138	112	97	782	
ALASKA	.	.	.	.	.	.	.	1	.	.	.	.	.	.	1
ARIZONA	.	1	.	.	.	.	.	7	.	1	.	.	.	3	12
ARKANSAS	.	.	.	1	.	1	.	1	.	1	.	.	.	.	4
CALIFORNIA	618	427	560	359	409	553	649	1127	713	772	753	728	721	645	811	9845
COLORADO	4	.	.	1	.	53	48	58	59	26	62	116	134	26	587	
CONNECTICUT	2	1	.	.	1	1	.	.	.	.	.	.	1	.	6
DELAWARE	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1
DISTRICT OF COLUMBIA	.	.	.	.	21	11	2	.	.	.	.	1	.	3	38
FLORIDA	.	.	.	.	.	.	.	.	.	.	1	1	22	2	26
GEORGIA	1	173	159	180	135	70	145	249	174	188	209	123	378	1693	4	3881
HAWAII	.	.	3	.	.	.	.	1	.	.	.	.	.	.	4
IDAHO	.	2	.	.	.	.	.	1	.	.	.	.	.	.	3
ILLINOIS	.	8	2	3	3	.	2	1	.	2	.	1	.	.	22	
INDIANA	.	.	.	.	.	.	55	354	71	102	67	31	.	.	680
IOWA	3	16	8	3	3	2	6	95	12	9	4	7	6	48	.	222
KENTUCKY	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1
LOUISIANA	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1
MARYLAND	.	3	1	.	.	1	.	.	.	.	2	.	3	.	10
MASSACHUSETTS	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
MICHIGAN	.	.	.	.	.	.	1	1	3	.	.	2	.	.	7
MINNESOTA	2	2	5	29	20	8	18	14	76	36	17	15	53	2	.	297

(Continued)

TABLE 10E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1981-1995

STATE	YEAR										TOTAL						
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		
MISSISSIPPI	-	-	-	-	-	-	25	101	87	132	234	101	284	243	187	1394	
MISSOURI	3	-	1	-	-	1	-	-	-	-	-	-	-	-	1	6	
MONTANA	21	18	11	5	34	12	19	143	28	24	5	-	-	-	1	321	
NEW HAMPSHIRE	-	3	3	6	6	25	15	12	12	32	9	-	-	-	-	123	
NEW JERSEY	-	-	-	-	-	1	-	-	-	-	-	-	-	5	2	4	12
NEW MEXICO	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	4	-
NEW YORK	4	2	71	-	69	122	-	-	-	1	-	-	-	1	1	3	274
NORTH CAROLINA	-	-	-	-	-	-	-	-	3	-	-	-	-	1	-	4	-
NORTH DAKOTA	6	1	-	-	6	-	-	2	-	3	4	3	3	22	31	81	
OHIO	-	-	-	-	-	-	2	-	-	1	-	-	3	-	1	7	-
OKLAHOMA	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	2	-
OREGON	2	1	-	5	1	-	-	9	1	-	1	2	-	-	-	22	-
PENNSYLVANIA	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-
RHODE ISLAND	20	14	6	2	1	4	10	2	1	12	63	1	-	-	-	136	-
SOUTH CAROLINA	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-
SOUTH DAKOTA	-	-	-	-	-	-	-	-	7	3	-	-	-	-	-	10	-
TENNESSEE	-	-	1	-	-	1	-	-	-	-	-	-	-	1	1	4	-
TEXAS	3	-	1	-	1	2	1	-	-	1	1	-	-	-	1	12	-
UTAH	-	4	16	8	6	6	3	10	7	13	82	-	-	2	1	158	-
VERMONT	1	1	-	2	-	-	1	10	-	7	-	2	-	-	-	24	-
VIRGINIA	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1	3	-
WASHINGTON	-	-	1	1	-	2	-	-	-	-	-	10	2	1	17	-	

(Continued)

TABLE 10E

NUMBER OF REPORTED SHIGELLA ISOLATES WITH UNKNOWN SEROGROUP FOR 1981-1995

STATE	YEAR										TOTAL					
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
WEST VIRGINIA	19	24	6	4	8	5	4	10	2	8	3	12	·	·	109	
WISCONSIN	9	2	·	·	69	61	49	34	39	30	82	52	·	·	427	
WYOMING	9	·	2	·	·	·	·	·	·	·	·	·	·	·	11	
TOTAL	728	705	857	608	701	909	1134	2287	1366	1580	1602	1217	1785	2935	1181	19595